

DESIGN THINKING FOR REAL-TIME TIMETABLE REMINDER SYSTEM APPROACH AND SMS ALERT

Dr.M.PRAVEENA¹, Associate Professor,

praveenamarannan@gmail.com,

SURJITH MADHAN. C², THOUFICAHAMED. J², UMAA MAHESWARAN. M²

Department of Computer Science,

Dr.SNS Rajalakshmi College of Arts and Science (Autonomous), Coimbatore - 49

Abstract—

Forgetting the stipulated time table or time of lectures due to one cause or the different has continually been a primary issue for college students or lectures ensuing in the lacking of instructions and thereby lagging in the back of in what the lecturer has been taught the different college students or losing time when the lecturer doesn't flip up for the lecture. The important reason of growing the actual time time desk reminder machine is to decrease this trouble to an appropriate level. Real time Timetable Reminder System is a cellular software developed on the Android platform for the college students and lecturers of universities with the provider of reminding them about their lectures. The most important equipment used in creating this software are python. Then Python used to be used to produce a response custom-made for every user's request to the application, MySQL is the database. The app has basic Time Based Reminders an extra feature. The app signals college students and lecturers when they are predicted to attend a positive lecture at unique time and venue via electronic mail notification in actual time.

Keywords— Reminder, design thinking, lecture, time-table, android phones, system.

I. INTRODUCTION

Time-tables are used day by day for scheduling lectures or any other things to do that are to be carried out in schools, colleges, and different institutes. A time-table gives data like the day and time in which the pastime has to take place.. A well-constructed timetable establishes a herbal rhythm and routine, which may be comforting to instructors and students. a scholar timetable with mandated duration lengths, and specific topics for each and every length helps administrators allocate adequate sources

to the principal important curriculum areas. But most of the time, college students and teachers prefer a hardcopy or a photograph of the time-table to maintain track of their lectures. There is a opportunity that they lose the copy or even the photo of the time-table and spending time in search of it can be tedious. To stop this problem, we have come up with an fantastic answer which will be each useful and time-saving choice for college students as nicely as the faculty.

II. RELATED STUDY

Mei Rui [1] In this paper, thru the evaluation and the summarization of the existing problems, a mathematical mannequin for the route timetable device is proposed. At the same time, thru the use of the sample attention science in synthetic intelligence, aiming at this mathematical mannequin a new college path timetable gadget layout software is proposed and realized. This application now not solely can properly clear up the shortages of the existing course timetable system, however additionally is easy and handy to operate, has sturdy versatility.

Bhaduri A [2] evolutionary methods have been used to clear up the time desk schedulingproblem. Methodologies like Genetic Algorithms (GAs), Evolutionary Algorithms (EAs) etc have been used with combined success. In this paper, we have reviewed the hassle of educational time desk scheduling and fixing it with genetic algorithm. We have further solved the hassle with a mimetic hybrid algorithm, genetic synthetic immune network (GAIN) and evaluate the end result with that received from GA. Results exhibit that GAIN is able to attain the superior possible answer quicker than that of GA.

Dipti Shrinivasan [3] Finding a viable lecture/tutorial timetable in a giant university department is a difficult trouble confronted continuously in instructional establishments. This

paper offers an evolutionary algorithm (EA) based totally strategy to fixing a heavily constrained university timetabling problem. The strategy makes use of a problem-specific chromosome representation. Heuristics and context-based reasoning have been used for obtaining possible timetables in a lifelike computing time. An shrewd adaptive mutation scheme has been employed for rushing up the convergence. The comprehensive course timetabling machine introduced in this paper has been validated, examined and discussed using actual world facts from a giant college.

III. SYSTEM METHODOLOGIES

This part describes the device design, input, output and processing necessities of the proposed gadget and the hierarchical plan of the proposed system. It additionally describes/defines exceptional factors that make up the system, how they are linked together, what the device does and how it operates.

A. EXISTING SYSTEM

The hand operated machine of time desk practice in faculties is very monotonous and time-consuming which consequences in both the identical instructors ending up with greater than one class at a time or a quantity of training conflicting at the identical classroom. Most schools have number of exceptional publications and every route has a range of subjects. Now there are limited faculties, every college instructing extra than one subject. Due to a non-automatic perspective, absolute utilization of assets has demonstrated ineffective. In order to deal with such problems, a automated gadget can be designed with computer aided timetable generator. The gadget will take distinctive inputs like quantity of subjects, teachers, most lectures a instructor can conduct, precedence of problem and subjects to be covered in a week or a lecture, thinking about which, it will create possible time tables for working days of the week, making super software of all assets in a way which will be best suited for the constraints. A appropriate timetable is then chosen from the most desirable solutions generation.

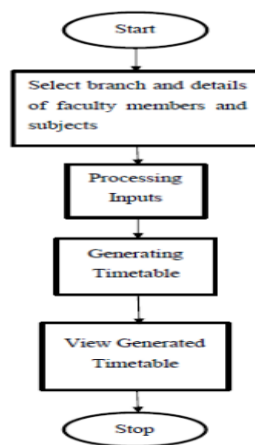
B. PROPOSED SYSTEM

The proposed machine “Automatic Timetable Generator” is designed to be greater environment friendly than the proper guide system. It invokes all base tasks that are now carried out manually. The closing gadget has to be in a position to generate time tables in a whole computerized way which will store a lot of time and effort of an institute administration. Ease of use for consumer of machine so that he/she can make automatic time table. It focuses on optimization of sources i.e. teachers, labs and optional topics etc. This machine affords a facility for everyone to view timetable and it generates more than one beneficial views from created time table.

In this paper, the sketch and implementation of the device through the use of a Python client, a PHP and Flask Web Server/API, a Relational Database Management System (RDBMS) MySQL and exterior connections to offerings such as If This Then That (IFTTT) are mentioned in detail. Some pattern functions and a prototype implementation with the Sensorial Shield are introduced as properly to exhibit the modern skills as properly as the possibilities for future work.

IV. PROCESSING OF OPERATIONS

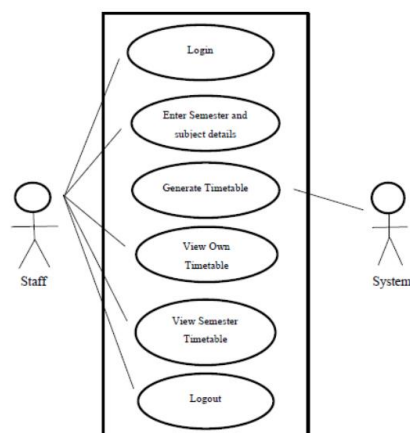
A flowchart is a kind of plan that represents an algorithm, workflow or process, displaying the steps as packing containers of various kinds, and their order through connecting them with arrows. The diagram under suggests the step via step working of the automatic timetable generator.



Use case diagram

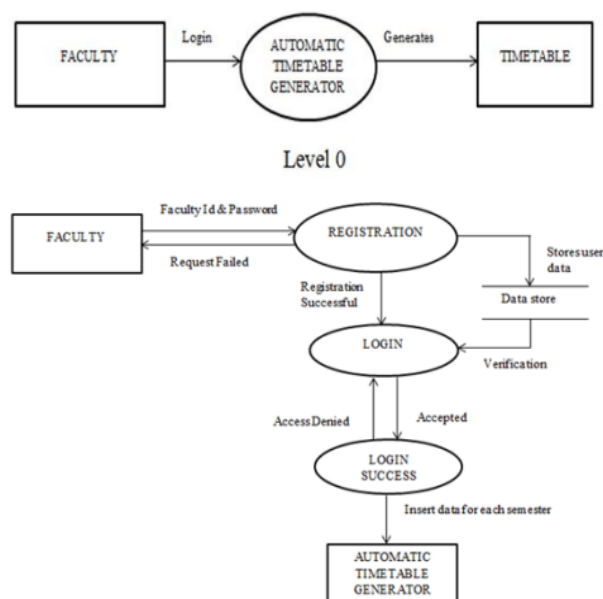
A Use case sketch at its easiest is a illustration of a user's interplay with the machine and depicting the specifications of a

use case. A use case design can painting the different kinds of customers of a machine and the a range of approaches that they have interaction with the system. This kind of graph is typically used in conjunction with the textual use case and will frequently be accompanied through different sorts of diagrams as well. Here the staff will enter semester and situation details. The device will process these inputs and generate the timetable.



Data Flow Diagram

A records glide format is a graphical illustration of the “flow” of records via an records system, modeling its process aspects. A DFD suggests what sorts of facts will be enter to and output from the system, the place the facts will come from and go to, and the place the information will be stored.



V. IMPLEMENTATION

Implementation is a section the place all that we concept of comes into the picture. All the modules of our task are

constructing the use of software program improvement approaches. In our project, languages that we have used are HTML, Database used is MYSQL, Framework is Python Flask, the server used right here is Machine Learning server (provided through our college), Operating machine is Windows 10 Modules that are developed in our undertaking are as follows:

A. Registration

In this module, each and every college desires to register themselves onto the portal. We furnish the consumer a number inputs to our system which receives save into the database.

B. Login

This is a submodule of registration. Once registered a user only wishes to log in each and every time they desire to get admission to the system. In this module, the person will have to grant important points about the semesters they are instructing in, topics and practical's they will take. Every school member has their college identification number which will act as registration and login credentials.

C. Generate

Once the small print are inserted into the database, the timetable generator can now do its task. Processing the facts provided, and using the algorithm wisely, the timetable for even/odd semester will be generated. Display of timetable generated through our system provides viewing of timetable semester wise.

D. SMS GENERATOR

IFTTT: It is a software program platform that connects apps, devices, and offerings from specific builders to trigger one or extra automation . “If This Then That” is the full shape of IFTTT. This phase of a Recipe is a Trigger. That section of a Recipe is an Action. IFTTT takes the APIs related with web-based services and lets these act as a set off to make some thing else happen. Here the web-based service is Webhooks which is a set off and the motion takes region by means of sending an Email. Moreover, IFTTT has partnerships with thousands of carrier companies that grant match notifications

to IFTTT and execute instructions that put into effect the responses, however some tournament and command interfaces are simply public APIs



WEBHOOKS:

Receive a internet request. This set off fires every time the Maker provider receives a web request to notify it of an event. For data on triggering events. Here there will be a specific key that is combined with tournament title and URL in the documentation of Web hooks service Power Available is the tournament identify that is linked with a special key. When the powered this event will be precipitated and an electronic mail will be dispatched to the receiver mail ID (Here the sender mail will be the one with which the IFTTT account is created)

VI. RESULTS

The following figures are the different screens of the lecture time table reminder application and the description of the action they perform are given along with them.

Login page

Dash board

Time table generator

Days/Hours	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6
Monday	Practical CN Lab	Practical CN Lab	Theory Cloud Computing	Theory Computer Network	Theory Python	Theory Cloud Computing
Tuesday	Practical CN Lab	Practical CN Lab	Theory Python	Theory Cloud Computing	Practical Python Lab	Practical Python Lab
Wednesday	Theory Computer Network	Theory Python	Theory Cloud Computing	Theory Cloud Computing	Theory Python	Theory Computer Network
Thursday	Theory Computer Network	Theory Computer Network	Theory Python	Theory Python	Theory Cloud Computing	Theory Computer Network
Friday	Theory Computer Network	Theory Python	Theory Computer Network	Theory Computer Network	Theory Computer Network	Theory Computer Network
Saturday	Theory Python	Theory Python	Theory Cloud Computing	Theory Python	Theory Cloud Computing	Theory Python

	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6
Monday	Python (Theory)		Python (Theory)	Python (Theory)		Python (Theory)
Tuesday	Python (Theory)				Python Lab (Practical)	Python Lab (Practical)
Wednesday						
Thursday						
Friday						
Saturday	Python Lab (Practical)	Python Lab (Practical)		Python (Theory)	Python (Theory)	

VII. CONCLUSION

This assignment implements lectures time desk reminder device on python platform. The plan and implementation of the challenge used to be successful. Users/students can advantage from this assignment with the aid of downloading the utility on their phones, putting in it, launching it with net connection is wished only at the first use of the utility in order to down load the pre-loaded lectures time table. And college students are allowed to set their respective amazing course(s) if at all that exists.

REFERENCES

- [1] Aman Singhal, 2010. Place Me: Location Based Mobile App for Android Platform. The University of Texas, Austin.
- [2] Ashok Kumar Naik, 2013. Developing a Location Based Reminder Application on Android Platform. Department of Electronics and Communication Engineering National Institute of Technology Rourkela.
- [3] Devale P.R. and Pawar V.R., 2009. Time and Location Based Reminder System. Nauonal level paper presentation Excelsior '09 at SeOE,Pune.
- [4] Diana Wills, "Today's requirements of mobile application development in the world", May 04, 2012.

- [5] Divya Dutta, Kuldeep Kumar, Rachit Singhal, Taruna Goswami, 2012. A major project synopsis On Event scheduler and reminder in android. Department of Computer Science and Engineering National Institute of Technology, Hamirpur (H.P.).
- [6] Dragan Perakovic, Vladimir Remenar, Sinisa Husnjak, 2012. Reminder Based on the User's Location
- [7] D. Rusling, The Linux Kernel. Berkshire, United Kingdom, 1996: [Online] "<http://tldp.org/LDP/tlk/tlk.html>"
- [8] Google Inc. (2007, Nov.) Android API Reference. Google Inc. (2010, Nov.) Android Developers: <http://developer.android.com/guide/developing/tools/adb.html>
- [9] G. Inc. (2010, Nov.) Android Developer Guide. <http://developer.android.com/guide/basics/what-is-android.html>
- [10] [http://en.m.wikipedia.org/wiki/Android_\(operating_system\).html](http://en.m.wikipedia.org/wiki/Android_(operating_system).html)
<http://developer.android.com/guide/components/index.html>: Android Components. <http://stackoverflow.com>
- [11] H. Oinas-Kukkonen, V. Kurkela, and I. Oulu, "Developing Successful Mobile Application", 2003, p. 5.
- [12] Kinjal Modi, Unnati Chauhan, Jaimini Rana, Chandni Patel, Avani Rana, Vaishali Patel, 2013. Greeting reminder application based android International Journal of Innovative Research in Computer and Communication Engineering (Vol. 1, Issue 2, April 2013).
- [13] Marko Gargenta, "Learning Android", O'Reilly publication
- [14] Pro Android, 3rd ed., Springer-Verlag New York, NY, 2009, pp. 69-132.
- [15] Yazriwati and Nik, 2006. Study of techniques of class schedule/timetable Retrieval via SMS for Students' convenience research vote no. 75109.